Figure 1. Melting Curves for Genotyping the Most Stable Mismatch

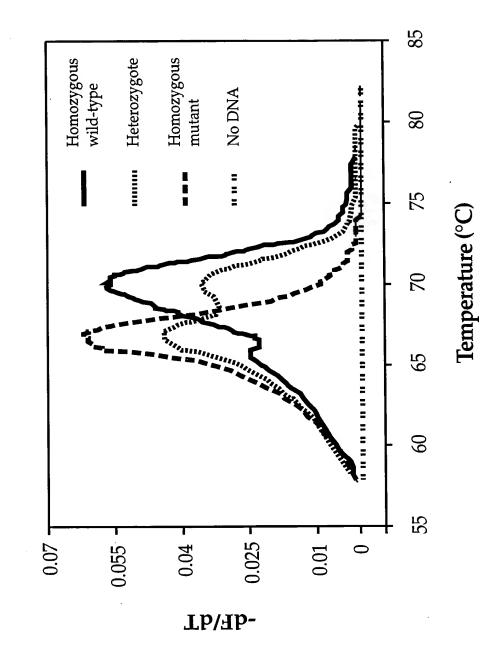




Figure 2. Continous (within cycle) monitoring of PCR with Hybridization and Exonuclease Probes

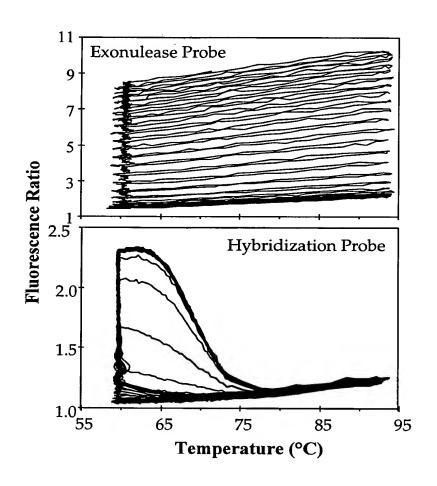




Figure 3. Multiplexing by Color and Tm

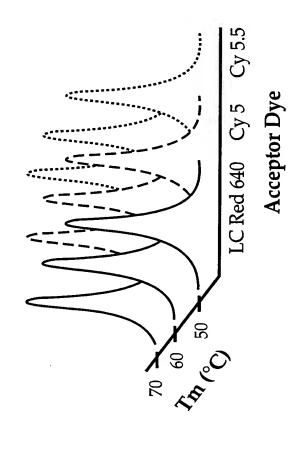




Figure 4. The Rapid CyclerTM

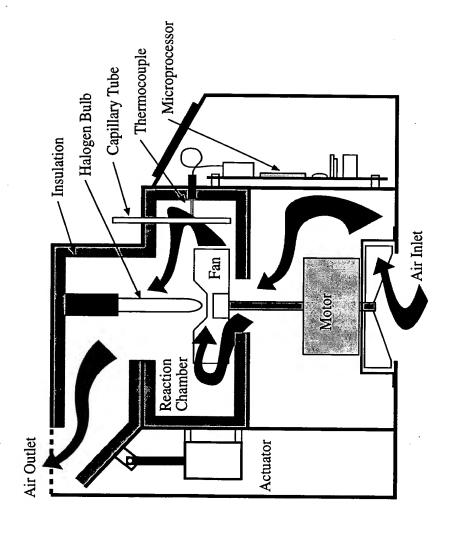




Figure 5. The Light CyclerTM

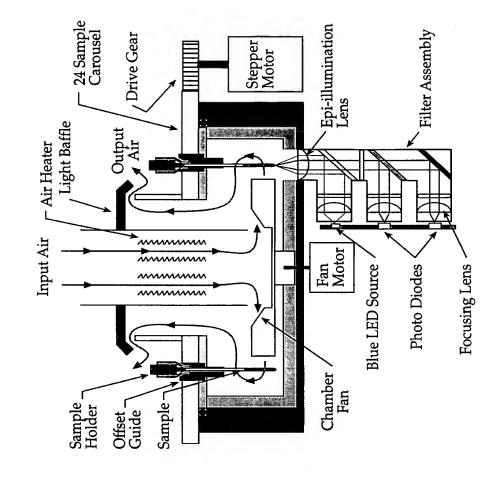




Figure 6. Spectral Overlap between fluorescein, LC Red 640, CY5, Cy5.5

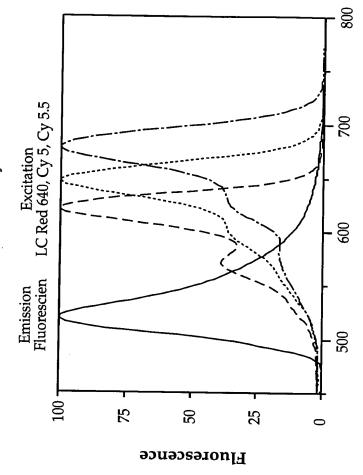






Figure 7. Emission Spectra of Resonance Energy Transfer Acceptors

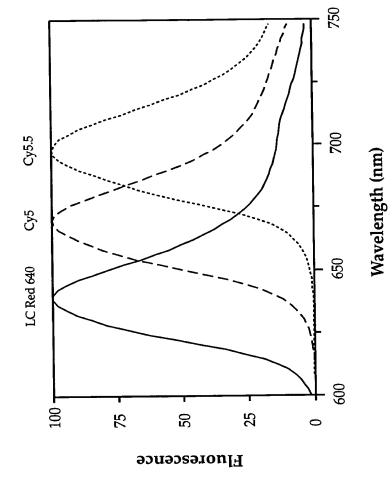
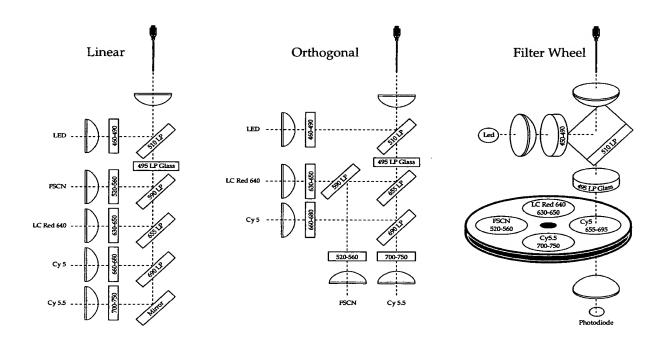




Figure 8. Four Color Light Cycler $^{\text{TM}}$ - Optical Design



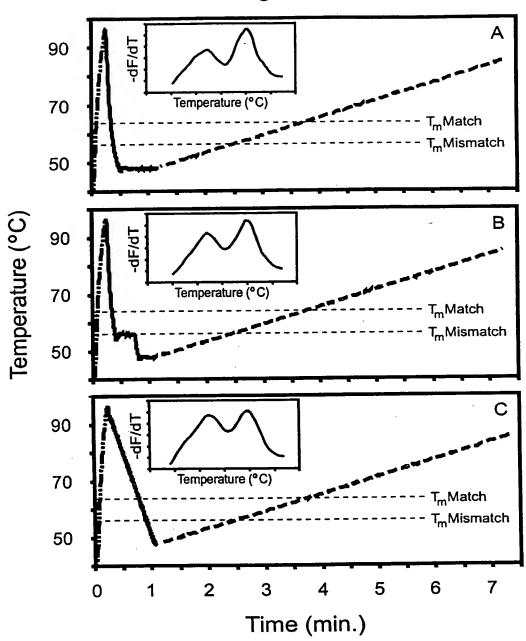
Percent of Spectra in Band Pass							
	FSCN	LC Red 640	Cy 5	Cy 5.5			
LED FSCN LC Red 640 Cy 5 Cy 5.5	47 48 1.5 0.7 0.4	0.8 <0.1 41 14 7.7	0.2 <0.1 7.8 43 16	0.3 <0.1 0.8 11 49			



E3 target 5' Codon 112 Codon 1158

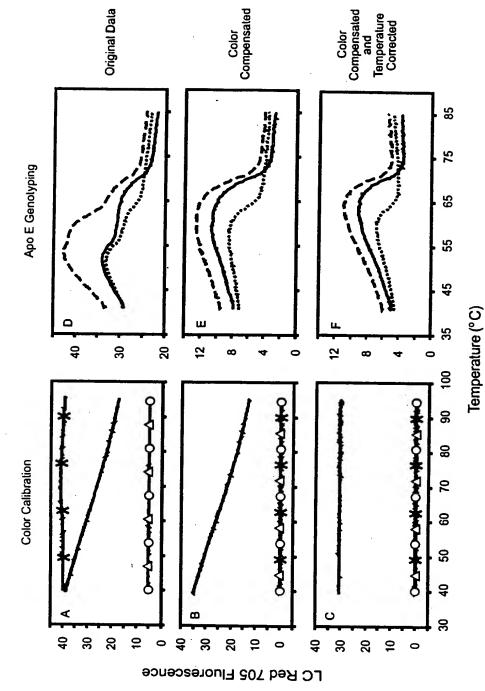


Figure 10.











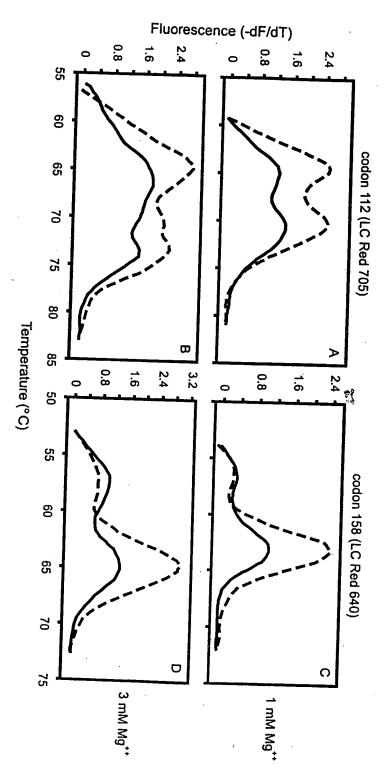


Figure 12.

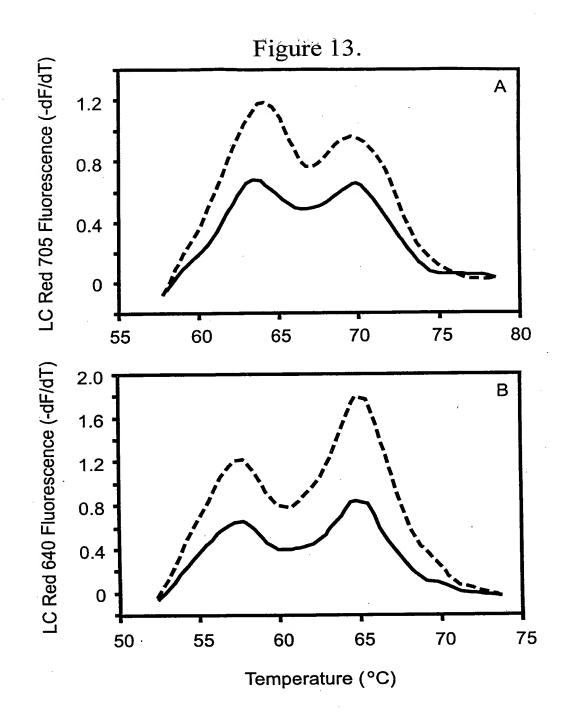




Figure 14.

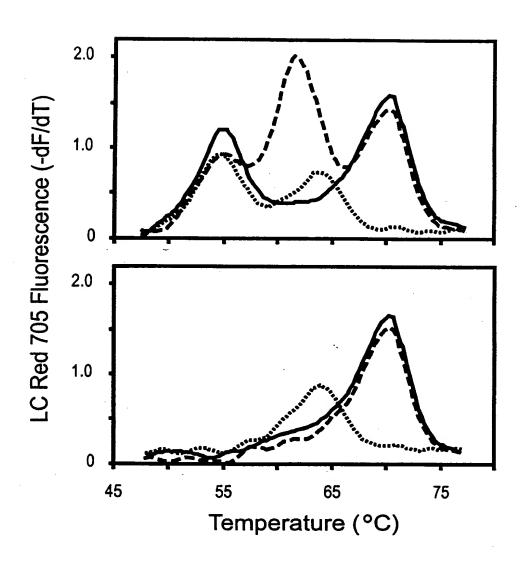




Figure 15.

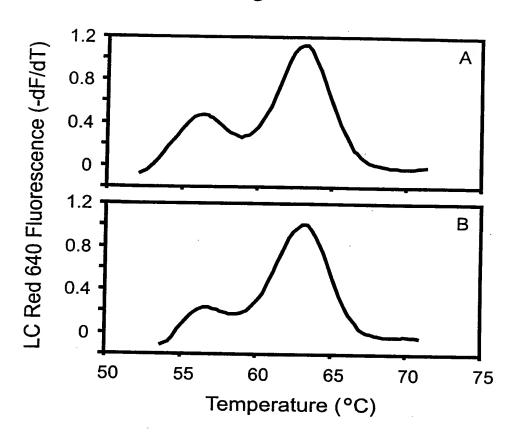




Figure 16.

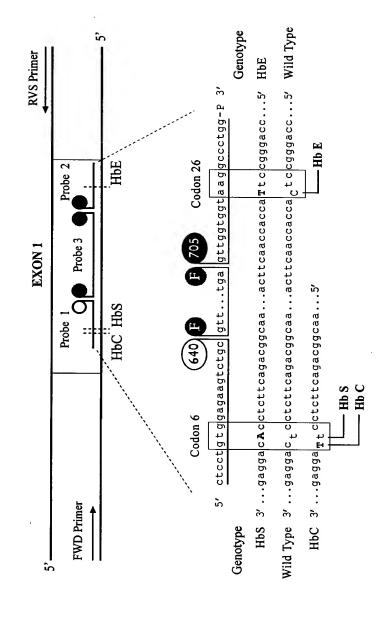
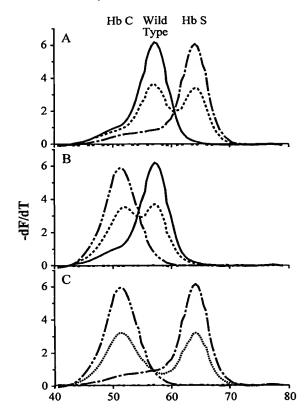




Figure 17.

Codon 6 Probe (LC Red 640)



Codon 26 Probe (LC Red 705)

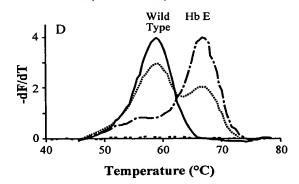
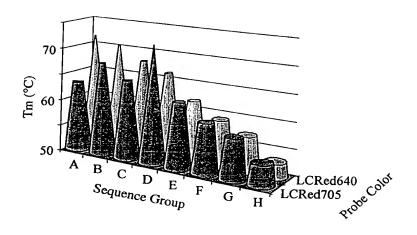


Figure 18.

Sequence Variation and Probe Design at HLA-A

CCGCGGGCRCCGTGGATAGRGCAGGAGRRKCCKGAGTATTGG	GG A C G C AG G	Matched Allele
GGCGCCGCGCACCTATCTCGTCCTCCCCGGCCTCATAACC	TGGTCCTCTGTGCCTTATACTTCCGGGTGAG	0101
Anchor Probe	TGCCCCTCTGTGCCTTACACTTCCGGGTGAG	0208
(Fluorescein)	Multicolored Probes	
(LCRed640)/	<i>(</i>	
LCRed705		

Figure 19. Predicted Tms for 2 Probes at a HLA-A Variable Reigon





	Matched Allele	0101	1101	rid		
on and Probe Design at DRB1	A GCAGAGCGGGCCGCGGT	CGTCTCCGCCCGGCGC	/rererececesses	/ CGTGTTCGCCCCGGTCCAHybrid	Multicolor Probes	
Figure 20. Sequence Variation and Probe Design at DRB1	GAACAGCCAGAAGGACHTCCTGG A GCAGAGGGGGGCGGGT AGGCGA C G CG	CTTGTCGGTCTTCCTGGAGGACC	Anchor Probe (Fluorescein)		(LCRed640)	(Cy5) LCRed705



Figure 21. Predicted Tms for 3 Probes at a HLA DRB1 Variable Region

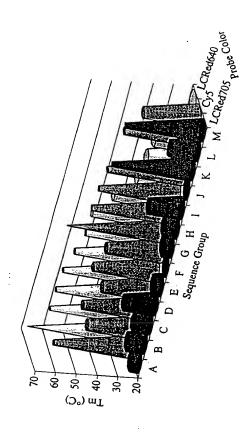
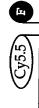
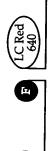




Figure 22. Scanning for Mutations





(Cy)

